Ecological Site Description ID:	R231XY137AK

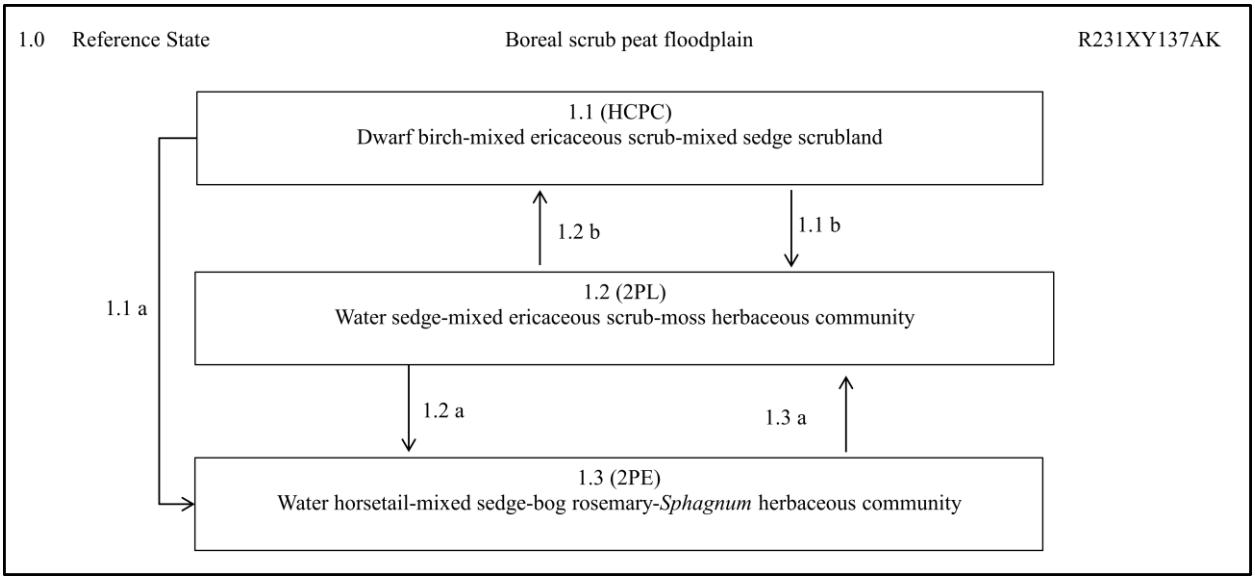
Ecological Dynamics of the Site:

This boreal ecological site occurs on linear depressions adjacent to river floodplains. The linear depressions being discussed tend to have some degree of standing water but appear to be cut-off from the main river channel. For community phase 1.1, soils were classified as cryaquents and were composed of organic matter over loamy alluvium. When looking at all sampled plots, organic mat thickness ranged from 54 to 158 cm in depth. The thick organic mat and lack of floodplain depositional material near the soil surface suggest that these linear depressions are stable and not frequently flooded.

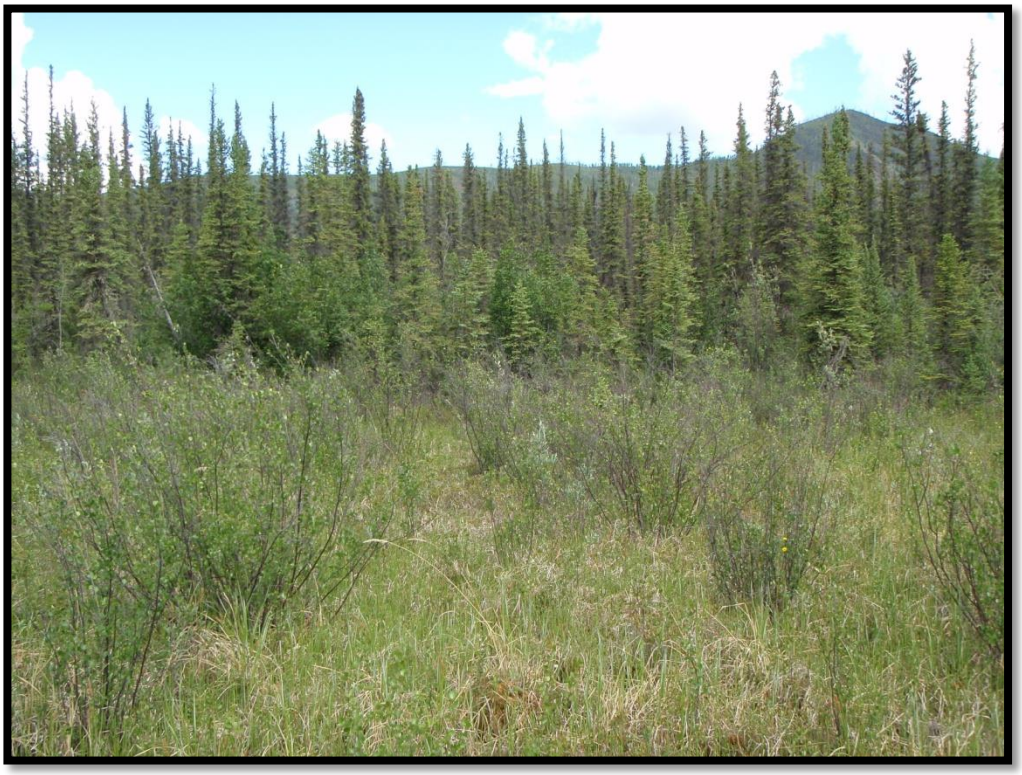
The degree of ponding was believed to result in three distinct phases. The most saturated areas tended to be phase 1.3 and the least saturated areas tended to be phase 1.1. Ponded water was commonly observed on the soil surface for both phase 1.2 and 1.3. Phase 1.3 tended to have thicker organic mats (mean of 142 cm) when compared to either phase 1.2 (mean 69.5 cm) or phase 1.1 (61 cm).

Other disturbance regimes were not observed and no alternate states were documented.

State and Transition Diagram:



State ID Number:	1	State Name:	Reference
State Narrative:	Phases within the reference state were grouped on the structure and dominance of forb, graminoid, and shrub species which was believed to directly relate to the degree of ponding within the linear depression. Tall shrubs are defined to grow greater than 10’ in height, medium shrubs are defined to grow 3-10’ in height, low shrubs are defined to grow 8” – 3’ in height,		

	and dwarf shrubs are defined to grow less than 8” in height.
Photo 1.1	

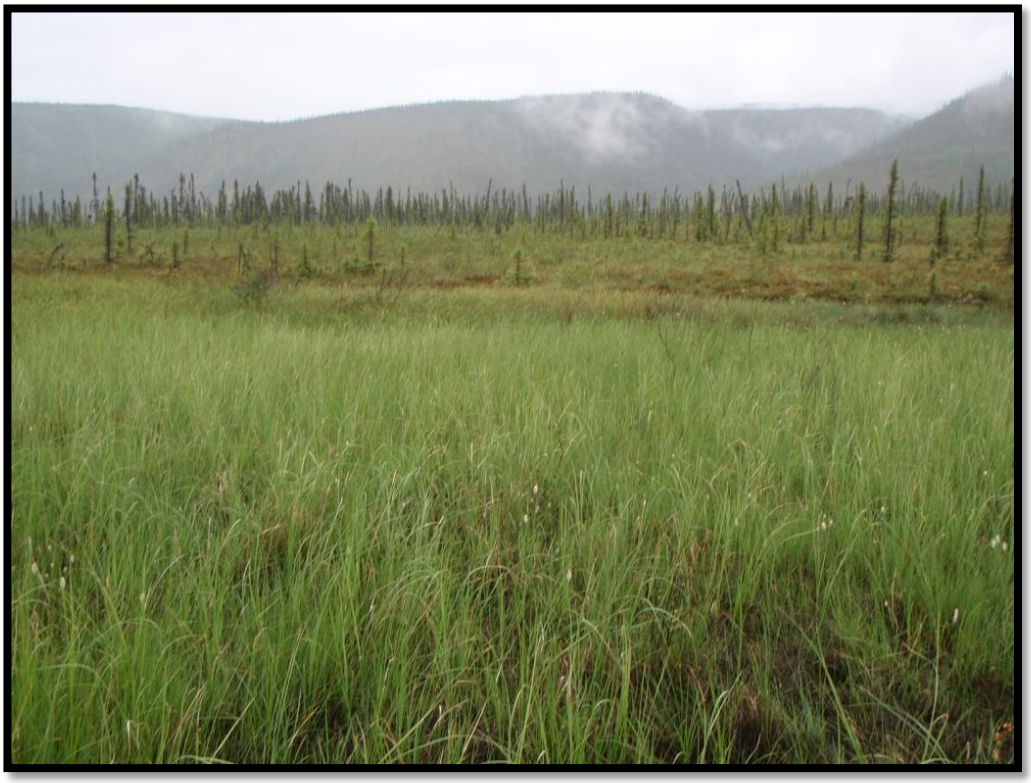
Community Phase Number:	1.1	Community Phase Name:	Dwarf Birch-Mixed Ericaceous Scrub-Mixed Sedge Scrubland

Community Phase Narrative:

This phase was primarily defined as a mixture of shrub and sedge species. Tree cover was not observed. The majority of shrub cover occurred in the medium and dwarf shrub stratums (total shrub cover ~40%). Commonly observed shrub species included *Betula glandulosa*, *Andromeda polifolia*, and *Chamaedaphne calyculata*. Graminoids were prevalent in sampled plot (~50% cover) and commonly observed species include *Carex aquatilis*, *Carex microchaeta*, *Carex tenuiflora*, *and Carex bigelowii*. *Equisetum fluviatile* and *Comarum palustre* combined for ~10% forb cover. Moss and lichen were not observed in plots. This phase had one observation.

Community Pathways

Pathway Number	Pathway Name & Description
1.1 a	Increased ponding may convert this scrub dominated phase into the forb dominated phase.
1.1 b	Increased ponding may convert this scrub dominated phase into the sedge dominated phase.

Photo 1.2	

Community Phase Number:	1.2	Community Phase Name:	Water Sedge-Mixed Ericaceous Scrub-Moss Herbaceous Community

Community Phase Narrative:

This phase was dominated by an assortment of sedges. Tree and shrubs were minor vegetative components. Albeit, *Chamaedaphne calyculata* and *Andromeda polifolia* were commonly observed (total shrub cover ~10%). Sedges were prevalent in sampled plots (~60% cover) and the most common species observed was *Carex aquatilis*. Forbs and lichens were minor vegetative components. Moss formed an abundant ground cover (40%) of which *Sphagnum* was prevalent (~15% cover). This phase had 4 observations.

Community Pathways

Pathway Number	Pathway Name & Description
1.2 a	Normal time and growth will transition this sedge community to a scrub community. As community shifts, water table appears to lower in soil profile.
1.2 b	Increased ponding may convert this sedge dominated phase into the forb dominated phase.

Photo 1.3	

Community Phase Number:	1.3	Community Phase Name:	Water Horsetail-Mixed Sedge-Bog Rosemary-*Sphagnum* Herbaceous Community

Community Phase Narrative:
This phase was dominated by an assortment of forbs and sedges. Tree and shrubs were minor vegetative components. Albeit, *Andromeda polifolia* was commonly observed (total shrub cover ~10%). Graminoids (~50% cover) and forbs (~50% cover) were abundant. Commonly observed graminoids were *Carex aquatilis*, *Carex limosa*, and *Carex vaginata*. Commonly observed forbs included *Equisetum fluviatile*, *Menyanthes trifoliate*, and *Comarum palustre*. Lichens were not observed. Moss formed an abundant ground cover (20%) of which *Sphagnum* was prevalent (~15% cover). This phase had 3 observations.

Community Pathways	
Pathway Number	Pathway Name & Description
1.3 a	Normal time and growth will transition this forb community to a sedge community. As community shifts, water table appears to lower in soil profile.